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ABSTRACT

A comparative analysis of foreign language teaching methods considered within the framework of the author's EBTA Cube (Eight Basic Approaches to Teaching) contrasts methods of instruction in three categories: (1) non-programed versus programed instruction, (2) mass versus individualized instruction, and (3) traditional versus compensatory instruction. The primary objective of this paper is to delineate the major characteristics of the distinct methodologies. The author elaborates reasons for making a shift from a mass-traditional to compensatory-individualized methodology. A diagram of the EBTA Cube is included. (RL)

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A TYPOLOGY OF FL EDUCATION WITH PARTICULAR
EMPHASIS ON COMPENSATORY AND INDIVIDUALIZED INSTRUCTION¹

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Discussions on FL teaching methodology usually consist of partisan statements and arguments in which the purported advantages of one method are juxtaposed to the alleged disadvantages of another, with a view to convincing the reader or listener to adopt one and abandon or stay away from the other. This procedure is considered acceptable and ordinary, and I for one, have often engaged in this kind of polemics (e.g., Jakobovits, 1970 a, b).

At the time of this writing, in the Spring of 1971, I feel that the polemical climate in FL education is beginning to change somewhat and I would like to attempt a different approach to this perennial problem that concerns us so much. Although there remain amidst us staunch method adversaries enlisted in one cause or another, my impression is that a great number of FL teachers hold a pragmatic view that is both eclectic and sound; they are not committed to a particular theoretical point of view and are willing to experiment with "whatever seems to work." I consider this an encouraging development which is more likely to benefit the students than is the rigid adherence to a particular paradigm. Consequently, I would like,

in this paper, to present a comparative analysis of FL teaching procedures that might help delineate their major characteristics. My attitude in this presentation can be characterized by the statement that no one approach is in and of itself superior to any other, but that some might be more suitable than others depending on the circumstances. My analysis will try to specify the relationship between the features of the teaching procedures and these teaching circumstances. What I am aiming for, then, is a context dependent analysis of FL teaching procedures.

The EBTA Cube

I would like to begin by proposing three basic distinctions that characterize the various FL teaching procedures: non-programmed versus programmed instruction, mass versus individualized instruction, and traditional versus compensatory instruction. Let us take up each of these in turn and examine their characteristics, the major assumptions and premises that underly them, and some of their implications.

Non-programmed vs. programmed instruction

To me the most salient differentiating feature between programmed and non-programmed instruction is the extent to which the content of a "lesson" is broken up into small unitary "steps" each to be acquired separately and sequentially. Programmed instruction often has associated with it special "hardware" paraphenelia (e.g., "teaching machines"), but I consider these coincidental (not, however, unimportant or irrelevant) and there exist programmed courses which use textbook-type materials for the presentation of the program. "Self-pacing" is

often a built in feature of programmed courses, but in most cases individual differences in rate of learning are not directly taken into account by the internal structure of the program, and translate instead, into how long it takes an individual to complete a "lesson" and consequently, the overall course. Individual differences in learning style are usually not taken into account. Some programs, for instance, will provide short-cuts for the fast learner and elaborations of some steps for the slow learner, while using the same principle of presentation in both instances. Programmed instruction insures acquisition by the very act of completion of the program by the student, and special achievement and performance tests for the course are thus not required. Every student who completes his programmed course or "module" is automatically considered to have been "successful". Finally, although programmed instruction constitutes "individual" instruction par excellence, in the sense that the student is alone with his mechanical or textual "teacher", it does not necessarily represent "individualized" instruction as characterized below.

The traditional justification for programmed instruction is the assumption that it is easier to learn small, clear, isolated steps, one at a time, then more or less large, inductively obscure principles. The major problem in programmed instruction has been the difficulty of breaking up the overall content of a skill or course into such specific steps ("frames"). Programmed courses thus vary in validity (the relationship between the steps in the program taken as a whole and the ultimate competence to be achieved), in efficiency (the relationship between how fast and with how many errors an individual acquires competence and his theoretical aptitude or ability), and in interest

(the attitudinal and motivational "cost" to the student).

The implications of the development of programmed instruction for education are quite serious and significant, although not necessarily in all aspects of education. Competencies associated with some particular "school subjects" may be more amenable to handling with programmed instruction than others, and they may be more significant with certain types of students than others (e.g., the slow and fast learners versus the "average" student). In my opinion, programmed instruction today faces the same kind of challenge that non-programmed instruction has faced for a long time, which is to combine it with compensatory and individualized principles of instruction (see below).

Mass versus individualized instruction

The fact of mass education, its existence and presence in our, and other technological societies, is not a result of merely the emergent need of educating large numbers of people. In its present form, it is no less a result of certain specific assumptions about the learning process and the intended educational objectives. I think this observation is notable because too often educators attempt to rationalize many recognized shortcomings of the educational system by saying that they are the result of an overflow of student population in our schools (or, alternately, an underflow of "qualified" teachers). Certainly it is understandable that overflows and underflows reduce the efficiency of a system. But an increasing number of people have come to believe that some of these shortcomings are to be attributed to the assumptions and principles of the learning-teaching process, and

have advocated different, often contradictory assumptions and principles. I would like to refer to this difference by the mass versus individualized contrast.

Mass instruction assumes that effective teaching is possible when a group of individuals are brought together in a classroom or laboratory and treated as multiple copies of one ("average") individual ("lockstep"). A relatively pure instance of this approach is basic army training; a contaminated instance is the typical large American graduate school - and there are shades in-between. This basic assumption has several corollaries, the most important ones being the following: graduates of the training program have similar minimal competencies and they can be made to learn in similar sequential and cumulative steps.

The major assumption of mass instruction is contradicted by the individualized approach which treats each individual as a different species of learner. This difference is analogous to the contrast between mass produced and custom built automobiles. Note that the principles and opportunities of mass production constitute a technological and economic reality which is what makes it possible to have custom built automobiles. Similarly, the reality of a public educational system, with its software of teachings and curricula, and its hardware of classrooms and laboratories, makes it possible to have individualized instruction (which should not be confused with one-to-one teaching).

As with orders for custom built cars, each individual learner is considered a unique and separate problem: graduates of training

program do not have similar minimal competencies and they can not be made to learn in similar sequential and cumulative steps. These beliefs lead to very different decisions about curricular content and development and to very different expectations about achievement, performance, and competence. Here, the notion of self-pacing assumes less trivial, more critical importance than in many current programmed instruction courses. Here, examinations and tests are not geared to the school year and "grade level" is not synonymous with age. The conception of "teacher", "classroom", and "homework" become less neat and well defined; instead we may speak of "tutor" or "facilitator" and more simply "work" rather than "class work" or "homework".

Traditional versus Compensatory Instruction

We come here to a distinction I wish to make that is likely to create more difficulties than the other two, partly because the word "traditional" ordinarily includes such a broad range of things, and partly because I have previously used the phrase "compensatory instruction" (Jakobovits, 1970a, Chapter 3) where, according to the more refined terminology presented in this paper, I would use "Compensatory - individualized instruction". I believe that the additional differentiation is useful and worth the effort.

Traditional instruction makes the following traditional assumptions: that formal education prepares the individual for the "real life" problems outside school; that courses and curricula provide specialized knowledge and skills which, in their aggregate, constitute professional or work-setting competence; that the discrete

skills and knowledge which makes up the content of courses and textbooks are to be selected on the basis of some sort of sampling distribution (in terms of their "importance", "frequency", "usefulness," "prerequisiteness" etc.), since they are too numerous to be taught in their entirety; that acquisition of a minimum specified number of such facts and skills constitutes ipso facto evidence of the acquisition of the specialized competence; that the specialized competence which is the purported goal of the instruction process can be adequately defined in terms of these discrete skills, which is to say, independently of the performer and the context of his performance.

Compensatory instruction specifically denies the validity of these assumptions of discreteness, of sampling, of sequential accumulation, of the quid pro quo of formal instruction and competence. The school is not considered as either a substitute or a preparation ground for society "out there," but is taken for its face value as a place in society, like the home, or the work setting, which individuals of a certain age are forced to attend, in which they must work and cope to survive as a part of their social and human condition. The school is thus a training and preparation ground only in the trivial sense that the home, the church, the neighborhood, the Boys Scouts, or whatever are training grounds. This is a trivial sense since every decade of an individual's life can be looked upon as preparation for the decades that come afterward.

If you look upon the school in this latter way, then the courses and curricula you encounter there would no doubt still provide specialized

knowledge and skills but whether, in their aggregate they constitute professional or civic competence is an open question to be carefully assessed rather than granted by definition. Similarly, it becomes a problem for demonstration whether professional or civic competence can develop in any other way but by doing and living professionally and civically. Furthermore, since our specific understanding of real life situations has always been immeasurably less than our understanding of abstract, theoretic, and artificial systems it remains to be shown that an effective formal instruction process, which requires specificity of knowledge, is at all possible under such conditions. Thus, that people can learn, is an undeniable fact of life; that people can teach, is an interesting hypothesis, but an uncertain one.

I have now completed my elaboration of the three binary distinctions of basic approaches to teaching. Since each dimension has been independently defined, we have a possible total of eight basic approaches to teaching. These can be arranged in a three-dimensional cubic figure, as in fig. 1a, or a two-dimensional figure, as in fig. 1b. I would now like to discuss the characteristics of a FL curriculum within such a model.

FL Instruction within the EBTA Cube

In this second half of my paper I am going to adopt a more argumentative style because I believe that fundamental changes are needed in the approaches to FL teaching which characterize many FL curricula in our public educational system at all three levels. Programmed instruction is not yet widespread in education, generally, and in FL instruction, it is used very infrequently, as far as I am aware. Individualized

instruction in FL teaching is even more recent a development, although there are signs that an increasing number of individual teachers have taken upon themselves the task of implementing some of its principles in their classrooms (see Altman, 1971, Rogers, 1969). Compensatory instruction is not yet a reality anywhere in the public educational system, but I shall try to argue that we have the know how to start implementing many of its principles. That leaves the non-programmed-mass-traditional approach (type 4 in Fig. 1) as the standard prototype practically everywhere. This approach, as defined in the first half of this paper, makes the following assumptions (in this, I am going to restrict my focus to the learning and teaching of a second language):

1. The teaching objectives of the language course are stated in very general terms such as "a speaking knowledge" or "a knowledge of 'the four' basic skills", rather than in specific terms as defined by a learning program. Furthermore, there is no need to break up the knowledge that is to be acquired into the strictly unitary steps of a programmed sequence.
2. With some exceptions (such as remedial classes), learners are treated alike in the overall instructional process.
3. Graduates of a FL course or program have similar minimal competence in the second language as attested by the obtention of at least a passing grade.
4. Individuals can learn a second language by going through similar sequential and cumulative steps as defined by the content of a set of lessons variously organized depending on the particular text or method being used.

5. The FL course prepares the individual for the use of the target language outside the classroom or laboratory.
6. Communicative competence can be broken up into discrete skills and "pieces" of knowledge for more efficient learning, and these discrete elements constitute the content of lessons, laboratory exercises, and homework.
7. The degree of communicative competence acquired is directly related to and assessed by the quality of performance on achievement tests (standardized or examination type) which sample attained knowledge of discrete elements presented in the lessons.
8. Communicative competence or knowledge of the language is defined in abstract, generalized, context-free terms.

Assumption (1) derives from the earlier discussion on non-programmed versus programmed instruction. Assumptions (2) to (4) relate to the distinction I have made between mass and individualized instruction, and (5) to (8) derive from the traditional-compensatory contrast. On the basis of my evaluation of the language learning process or the development of communicative competence (see Jakobovits, 1970 a, c), I have come to believe that, with the possible exception of the first (see discussion below), the assumptions associated with the mass-traditional approach are unsound. The following arguments substantiating my impression can also be looked upon as a characterization of the individualized-compensatory approach to language teaching (non-programmes or programmed).

I start with the general premise, often stated by Carroll (e.g., 1965, p. 22) that students in a FL class learn, if anything,

precisely what they are taught. This assertion can be interpreted at two different levels, both of which I believe to be valid. At one level, an audiolingual course that emphasizes "oral skills" will show higher achievement scores on tests of listening and speaking performance than a "traditional" course that emphasizes reading and writing, and at the same time, it will show lower scores on tests of reading and writing as compared to the "traditional" course. At another level, one that is not discussed to the same extent in the FL teaching literature, the language skills acquired in the classroom or laboratory will be different from the language skills needed for communicative competence outside the school. That these represent different skills is attested by the common observation that the relationship between success on language achievement tests or course grades and the success in communicating in the target language in real life situations is weak. This weak relationship also holds in the reverse situation where individuals who have learned a second language "in the streets" and have success in communicating in it, do not necessarily obtain high scores on standardized achievement tests.

A corollary to this basic assumption is that the development of communicative competence occurs only in learning situations where there is a real communicative need, and in response to it. The classroom and the laboratory in the context of formal education constitute a social setting where the communicative needs are different from those in non-school settings. This means that the school achiever will develop a pattern of communicative competence that is different from and not

suitable for meeting the communicative needs outside the school. I am not arguing here that the school context is irrelevant; only that it is irrelevant to a significant number of non-school contexts. For instance a formal course in History may be relevant to contributing to our understanding of the historical process as viewed within an academic frame of reference, but its relevance to understanding the daily events reported on the front page of a newspaper, is unconvincing. The study of Latin may be relevant to an understanding of Latin and Ancient Roman civilization, but its relevance to anything else is a moot point. Similarly, the study of a FL in the classroom may develop certain worthwhile knowledge, but its relevance to the use of that language for communicative purposes outside the school appears to be small (e.g., see Carroll, 1968).

Let me argue now in more specific terms. It is generally accepted in FL education today that the development of listening comprehension skills is a highly specific affair and that students must be exposed to fluent native-like speech to be able to understand a native speaker of the target language (as, for instance, a foreign movie or radio broadcast). But this principle is overlooked in most of the other communicative functions of language. For instance, it is generally assumed that asking and answering questions in a pattern practice exercise or a simulated dialogue on the content of a lesson serves to develop the skills needed in asking and answering questions in a real conversation or communicative setting. This expectation is contradicted not only by the daily experience of the FL teacher, but as well, on account of a theoretical analysis of simulated classroom

dialogues and real ones. The ability to ask and answer questions is dependent not only on the knowledge of the relevant vocabulary and syntactic patterns but also on background knowledge about the social rules or conventions of conversational interaction and on inferences about intent, appropriateness, and the like. For instance, one does not ask a stranger's name when he has just identified himself to another speaker in our presence. Consider the following conversational sequence:

A1. How long have you been in Montreal?

B1. Three months. And you?

A2. Ah, I'm an old resident of Montreal. We moved here when I was a child. And how do you like it so far?

B2. Well, it's different. I never lived in a large cosmopolitan city before. I imagine it takes people a while to get used to the hustle and bustle ...

A3. Well, yes. Where have you lived before?

B3. In Quebec City. It's much quieter there and the population is more homogeneous. Mostly French Canadian, you know.

A4. I don't know Quebec very well. ... Do you have any children?

B4. Two boys and a girl. They all go to Gardenvue Elementary.

Note that the question in A1 is appropriate only if A has reasons to believe that B is a new comer to the city. The question in B1 has no such implications yet it is appropriate in response to A's question. The question in A2 is permissible as a retort to the earlier answer in B1. Had A1 and B1 not preceded it, this question would have been phrased differently and in such a way as to refer to the missing part by means of

some sort of elliptical reference to the missing part (e.g., "Well, I understand you are a recent arrival to our city. How do you like it so far?") Note that A3 contains an assent to a question that is only implied, not stated, in A2 (e.g., "I imagine ... bustle ... Don't you think so?"). And so on for the rest of the sequence.

Now consider an analogous conversational sequence in a simulated classroom dialogue.

A1. How long have you been in Montreal?

B1. Three months.

A2. How do you like it so far?

B2. I like it very much.

A3. Where have you lived before?

B3. In Quebec City.

A4. Do you have any children?

B4. Yes.

A5. How many?

B5. Three.

A6. Boys or girls?

B6. Two boys and one girl.

This second sequence is not merely more stilted, more unnatural, more forced; a different organizational sequence underlies the conversation, one that is appropriate in another communicative context (e.g., interview situations where B "submits" to A's questioning for whatever particular reason).

I have given a fairly trivial example, but I hope it illustrates my point. I shall not go into any further details here, but think of

the wide range of conversational encounters where differences of this sort become evident: asking for information, expressing an opinion, reporting an event, elaborating a statement, justifying an assertion, explaining, making small-talk, joking, complimenting, subtly disagreeing, appearing unprejudiced, and so on, to the full range of everyday, ordinary, commonplace conversational interaction.

FL educators, when presented with arguments such as these, often reply that "liberated expression" is only to be expected at more advanced stages of language learning, that in elementary language training one must first go through the admittedly artificial exercises of pattern practice and classroom dialogues. I question the soundness of this sequential hypothesis that considers the elementary exercises either a prerequisite to "liberated expression" or, a simpler, more basic, more elementary form of it. I am confident that a communication analysis of the typical classroom interaction will show it up as being no less complex than ordinary conversational interaction, but different from it. Certainly it is the case that the "street produced" bilingual learns the rules of ordinary conversation without going through the so-called elementary, non-ordinary classroom conversational pattern.

Let me summarize my argument thus far. The classroom represents a non-ordinary, specialized communicative setting, with its own complex rules of conversational interaction and specialized functions for language use (e.g., instruction and problem solving). Ordinary commonplace conversational interaction has its own and a different complex set of rules, and it cannot be replicated or simulated in the classroom. The communicative competence that underlies it can only be developed in real life situations.

The FL educators and teachers who become convinced of the validity of this argument will be faced with the necessity of making certain difficult, exploratory, but, I think exciting, decisions that will radically change the contemporary spectrum of the FL curriculum. It will be a change away from the mass-traditional approach to the compensatory-individualized approach. The extent of displacement they may achieve as a result of these new policy decisions will no doubt vary with the existing social, political, and administrative conditions of each school community. This is as it is - but the crucially important point is that each decision that is made, no matter how small in consequences, be of such character as to move the spectrum of FL instruction away from type 4 in the EBTA cube (mass-traditional) to types 1 and 5 (compensatory-individualized). I would like to suggest some major policy decisions that have this character.

1. The diversification of the FL curriculum while simultaneously restricting the instructional objectives of particular courses within the curriculum (see also my discussion in Jakobovits, 1970 b and 1970 a, Chapter 5). Traditionally stated objectives such as "a knowledge of the language" or "a knowledge of 'the four' basic skills" are euphemisms for goallessness and confusion. Instead, objectives ought to be stated within three major functional types, (a) ordinary commonplace conversational use; (b) monadic language use; and (c) non-ordinary specialized language use. Specialized courses with restricted focus may be offered within each of the three major types. Thus within the type of ordinary commonplace conversational use there will be courses or sections with "how to..." titles in the following form: How to Speak to Strangers in French;

How to Shop in Japanese; How to Make Friends in Russian; How to Travel in Spanish; and so on. Within the monadic language use type, courses having rather solitary objectives can be specified in the following form: How to Read Classical Literature in Arabic; How to Write Business Letters in Hebrew; How to Enjoy Indian Movies; How to Listen to French Canadian News Broadcasts; How to Decode Chinese Propaganda Leaflets; How to Pray in Tibetan; and so on. Finally, within the type of non-ordinary specialized language use we would have the following: How to Study Chemistry in German; How to be an English-Albanian Simultaneous Translator; How to Talk to Your French Teacher; How to be a Comedian in Italian; How to Give the Impression of Being a Multilingual Person; and so on.

I hope these rather comical titles do not discourage the serious FL teacher who is contemplating a move toward compensatory-individualized instruction. I allow myself a little bit of humor in an area too devoid of it. Why does FL learning and teaching have to be such a grimly serious and painful enterprise? Think of how much fun students would have in a course entitled "How to be a Comedian in Italian". And think how much of the Italian language and culture they would learn in such a course even if they failed the Italian Cooperative Listening Comprehension Test. Naturally, the FL teacher would be hard pressed to find a textbook on Italian Humor for Second Language Learners, Level 1. But who needs it? I would much rather trust the intuitions of the Italian FL teacher who appreciates Pasta, Mama, and Don Giovanni.

2. Grades in FL courses ought to be based more on the individual student's involvement than on his performance on achievement tests. By student

involvement I mean to refer to the extent to which he engages in the following activities: helping to determine the nature and objective of the course, both contentwise and proceduralwise; helping to determine assessment procedures and evaluation criteria for progress and substantive achievement; assuming responsibility for their own learning and course related activities; making decisions about the languages taught and the overall shape of the FL curriculum; and so on. This type of student involvement gets us away from the perennial and unproductive problem of "How to motivate the FL student" for the simple reason that unmotivated students under the conditions I am describing would not be caught alive in a FL course. Carl Rogers, the famous clinical psychologist-educator has described in moving terms the beautiful relationship that a teacher can have with his students under conditions which I would describe as compensatory-individualized. In his recent book Freedom to Learn (Rogers, 1969) he describes various 'contracts' which the teacher-facilitator and the students can draw up at the beginning of the course to insure this type of student involvement. It is a text that I recommend to all educators, parents, and students in any educational field of endeavour.

3. Student counselling ought to form an integral part of the FL curriculum. In a previous paper (Jakobovtis, 1971a) I have elaborated six premises which form the psychological bases of second language learning. These were as follows: (1) bilingualism entails biculturalism; (2) bilingualism cannot as a rule be achieved in the FL classroom; (3) there are valid educational objectives in learning a second language that are other than the attainment of bilingualism; (4) learning a

second language has associated with it factors and considerations that are unique to it and are different from learning other school subjects; (5) when a large proportion of students fail to learn a second language in school, their "failure" is not a reflection of the teacher's competence or the method he uses; and (6) the conditions that hold under a mass educational system are unfavorable to the development of an effective FL curriculum. Learning is a sacred and sublime activity. It ought to be respected for what it is, namely a very personal and intimate affair. Language learning is particularly important and special because it is the contact point between the individual and his social and physical environment. Individuals vary in interest, ability, aptitude, attitude, motivation, and problem solving style. The school ought not to be a place where the individual merely learns, but also a place where the individual discovers why he learns and how he learns. This cannot be accomplished in our present classrooms where students are treated as mechanical pawns in a giant educational factory. I would advocate the establishment of small encounter groups (see, for instance, my description in Jakobovits, 1970d) within the FL curriculum which would provide them with the opportunity of examining their attitudes and learning styles in the study of a second language. These encounter sessions can serve to establish a personal and human relationship between the FL teacher and student, can serve as the occasion for drawing up the course contract, and can create a greater awareness of the self as a learner and the psychological implications and consequences of bilingualism and biculturalism. The educational commitment, as I see it, must

always be centered in the development of the individual rather than in the acquisition of a pre-determined body of knowledge or set of skills.

Educational Slogans and the Sequential Hypothesis

The field of education ordinarily operates within and by means of educational slogans (see Gordon, 1971). These slogans are represented by folk-theoretic explanations given by teachers and other educators for existing practices and diagnostic activities. Here are some examples: "Students are not working up to their abilities"; "FL instruction is designed to teach the students to communicate in a second language"; "The problem is how to motivate the students"; "I use method x to teach"; "Basic patterns and vocabulary must precede free expression" and so on. The justification of educational slogans (their rationality versus their superstitious application) is a topic not unlike that of the emperor's clothes in the children's story: there is a silent conspiracy (negative contract) not to mention it. I am particularly interested here in the sequential hypothesis. This hypothesis has become so ingrained in the very conception of language teaching that it is seldom remembered that this is a hypothesis rather than a self-evident truth, so much so that questioning its implications strikes many teachers as odd. But consider.

A child learning a first language is ordinarily exposed to the full range of syntactic patterns of the language of adults and although there is such a thing as "baby talk" that some adults use in interacting with young infants, there is no evidence that this adjustment pattern or anything else that anxious middle-class parents

do to "speed up" language development has any significant effect on the child (see Smith and Miller, 1966; Lenneberg, 1967). This experience shows that language can be learned contrary to the sequence hypothesized in the basic patterns and vocabulary hypothesis. If you think that second-language learning is different from first-language acquisition in this respect, then think of the common fact that many individuals who are immersed in a culture (e.g., immigrants) come to develop communicative competence in the second language in the absence of a formal instruction procedure that is guided by the sequential hypothesis.

In the light of these two common observations, you might wish to change the sequential hypothesis such that it is a hypothesis about the most effective procedure of learning a second language in school. But what evidence do you have that this is indeed so? What is an alternative hypothesis? You might say, for instance, that students will learn, if anything, precisely what they are being taught. If they are taught basic patterns and vocabulary in artificially structured verbal interactions, they will be able to perform under those conditions, but they will not be able to interact in ordinary communicative interactions. The expectation of transfer from the first to second communicative setting has too often remained unfulfilled to deserve continued faith. Why not begin the teaching of a language at the second level, in those cases where communicative competence in free conversational interaction is the goal, rather than hope it will materialize by itself in later stages or reserve the practice of it for "more advanced" language learning stages?

Note that the very notion of "basic" patterns and vocabulary is a weakly defined one. Anyone who has transcribed tape recorded versions of free speech must be convinced that we do not ordinarily speak in alternating "sentences" of the type one practices in classroom exercises and simulated dialogues. It is possible, of course, to write an elementary text in such a way that it contains x number of patterns and y number of words and to practice artificial dialogues containing no more than the particular patterns and words in the "basic" text. But this is possible only because what is being said and how it is said is artificially restricted in advance. Even the simplest of free communicative interchanges, however, do not subscribe to this artificial restriction, and it is not a source of much satisfaction to realize that say, 80% of what is ordinarily done in free speech will be subsumed under the "basic" patterns and vocabulary since it takes the other 20% to successfully transact any conversation.

Rejection of the sequential hypothesis does not necessarily imply the absence of any structure in teaching, even though it is true that, at the moment, we do not know precisely how to systematize the instruction of free conversational competence. This is not because the latter type of structured instruction is inherently more complex and difficult to achieve, but because we have not focused in our past research and teaching on the systematic organized nature of ordinary conversations, and until we do so we shall remain hesitant and ineffective in our teaching of it (for a start in this, see Sacks, 1971 and the discussion in Jakobovits, 1971b).

Anyone who cares to think about it would realize that language is used for many different purposes and in many varieties and registers. These different functions and varieties have different, partially independent, underlying skills and competencies and it is naive to think that the same basic hypothesis about teaching procedures can effectively meet the various learning needs in their development. The traditional classification of the "four basic skills" into listening, speaking, reading, and writing categories seems totally inadequate in the light of recent discoveries in sociolinguistics and ethnomethodology (Ervin-Tripp, 1967; Garfinkel, 1968; Sacks, 1971; Searle, 1969). A more realistic approach would take into account the functions and varieties of language as defined by the context in which the language is to be used: ordinary conversational interaction, using language for instructional purposes, reading for pleasure, writing business correspondence, and so on. A realistic goal for our current educational objectives in FL instruction would be for the curriculum to establish three separate and independent "tracks": one track for ordinary conversational interaction, another for reading, and a third for instructional use. Each track would be made up of a flexible package of mini-courses or modules, each worth a certain amount of credit points upon completion. Students should be counseled which track to take on the basis of diagnostically evaluated assessment procedures including aptitude, time and opportunity available for study, interest, learning style and perceived goals (see my discussion in Jakobovits, 1970a, Chapter 3). The procedures and materials to be used with each track ought to be developed by the FL teacher in accordance with a specification of the skills to be

acquired. It is important to choose fairly specific terminal behaviors, defined by communicative context and setting, and begin training under those conditions at the outset rather than under some allegedly prior or basic but artificial conditions.

The FL teacher is the person who must implement these changes. The prevailing hesitancy of the FL teacher in implementing changes and his dependence on methods and commercially available courses must be actively discouraged by FL administrators and supervisors. For over twenty years now, the FL profession has encouraged this kind of dependence and if it had been effective it should have been more successful than it has in fact been (see Carroll, 1968). It's time for a swing of the pendulum in a totally different direction, in the assertion of the teacher's role as the one who makes the instructional decisions. Nothing short of this is compatible with the professional responsibility and personal integrity of the teacher.

Programmed FL Instruction

The role which programmed instruction can play in FL teaching needs careful evaluation. I stated earlier that the programmed-mass-traditional approach (type 8 in the EBTA cube) can involve the same difficulties and shortcomings that we find in the non-programmed-mass-traditional approach (type 4). The challenge of developing programmed FL courses lies in the application of programming principles to those of individualized and compensatory instruction. If that can be done, I would gladly relabel the sides of the EBTA cube in such a way as to make type 5 into 'number one'. At first blush it would seem that

nothing could be more antithetical to individualized and compensatory instruction than the image of a student sitting in a solitary cubicle pressing the buttons of a teaching machine or computer console. I would hate to elaborate such an Orwellian scene. However, it is the case that even within the context of our present impersonal educational institutions some students seem to be functioning well with programmed courses. Hail to them! It seems to me that within the context of individualized and compensatory instruction the principles of programmed teaching can serve a useful and unique function. Where there is a need for brute force rote memorization, programmed materials can be very handy and efficient. A learning program consisting of small conversational sub-routines can be both interesting and helpful. Furthermore, teaching programs can serve to diagnose learning problems through error analysis, and can provide additional individual practice when needed. Finally, in the absence of other educational opportunities (such as a FL teacher in a particular language) the programmed laboratory can play an essential function in strengthening the FL curriculum.

I am restating with the above comments some of the ordinary things we say today about teaching machines and programmed instruction. It might be worth exploring some non-ordinary things we can say about a programmed FL curriculum. I might start with the following statement: a program is a theory about the structure of knowledge and the process of its apprehension by the human mind. A language learning program would thus be made up of three sorts of things. One will be a descriptive grammar of the language laid out in a matrix that can form the blueprint for a sequence of linear and branching frames and modules. The second

will be a set of specific hypotheses about a learner's inferential and problem solving activities. And the third will be a set of general principles concerning the storage and retrieval mechanisms of the mind. The total number of frames is likely to be a very large number although the number of frames used by any individual learner would be a much smaller number, the actual size varying greatly from one learner to another. The construction of frames would be guided by aspects of the three set of things just mentioned: the descriptive grammar in matrix form will guide the areas to be covered, one or more frames for each rule or point of grammar; the content and form of each frame will additionally be influenced by the programmer's hypotheses about how various learners apprehend grammatical inferences, inductively and deductively. At this stage a number of alternative frames arranged in branching sequence will be constructed for each point of grammar, these alternative forms being guided by expected variations in style of inferential behavior. These alternative branches will serve as remedial or compensatory devices during the execution of the program by individual learners. Finally, the frames will be arranged in a structured grid of interconnecting access points in such a way as to provide sufficient practice for storage and retrieval in the mind of the learner while simultaneously excluding unnecessary steps. If you look at the program steps from the first frame to the last as an inferential maze, then the actual route taken by each individual learner will be potentially different from that of any other learner, being determined exclusively by learner characteristics in congruence with the principles of compensatory and individualized instruction.

Now let me return to the Orwellian image once again. Would such a program be equivalent to having a language teacher or could it possibly replace the language teacher altogether? This question reminds me of the robot stories in science fiction literature. In one of these, as I recall, human-like robots were constructed and their outward physical similarity to humans was so perfect that they were actually indistinguishable from real humans. Furthermore, their artificial 'positron' brains were functional duplicates of human brains. Is a robot that is indistinguishable from a human a robot, or is it another human? Is a program that can duplicate the environment a teacher can provide a program or is it a teacher? Posing the problem in these terms makes it obvious that we are not asking a real question. Perhaps we should ask, more profitably, what is it about the environment a teacher can provide that is different from the environment the program can provide, and is this difference relevant for the competence that the learner is to acquire? Here we must distinguish between two sorts of programs: if we are thinking of a 'fantastic' program, by which I mean one that can talk and think like a human, then it is obvious that the program will be at least equivalent to the teacher, and probably much better. But at this stage of our knowledge this kind of program remains truly a fantasy, even to the point where it is not at all clear whether it could ever become a reality. If we are thinking of 'real' programs, by which I mean not only those that our present technology might generate, but as well, future foreseeable technologies, then what such a program would be lacking would be that which any ordinary speaker could provide, namely the opportunity

of carrying out an ordinary conversation. Thus, it is now conceivable that a programmed FL course in combination with exposure to ordinary speakers of the language could be at least equivalent to and possibly better than the FL teacher. Now this conclusion is obviously not satisfactory since experience shows that a FL can now be learned solely as a result of exposure to ordinary speakers of the language in the absence of either a programmed FL course or a FL teacher. So the question of the machine versus the teacher remains unresolved. And maybe this is as it should be.

No doubt a more practical question is, what the program can do for the FL teacher and the FL learner? I think the usual answer which says that the program can free the teacher from routine tasks involved in rote memorization and practice drills, while probably true and not inconsequential, is nevertheless selling the program short. It overlooks the fact that programmed modules of limited scope can facilitate the learning process in ways that are completely beyond the capacity of the human teacher. Individualized, compensatory and remedial instruction must be responsive to individual differences in style and rate of learning in such a way as to provide the opportunity for exposure to a sufficient number of alternative branching sequences of frames that is far beyond the attention span and control of a human teacher, yet it provides no special problem for even our presently available hardware in computer assisted instruction. It is true that we do not have many comprehensive programs available at the present time, but I think this is less because of an absence of know how than the absence of practice and development. For one, the hardware associated with computer assisted

instruction is very expensive and beyond the range of most educational establishments. For another, most teachers have not shown any interest in contributing to the development of such instructional programs, not even the simple kind that need no special hardware or expensive hardware. It is here that I feel that a change in attitude on the part of FL teachers would be most useful and productive (see Howatt, 1969, for useful hints).

There are two large areas of the EBTA cube with which I have not dealt so far, namely the individualized-traditional (type 2 or 6) and the mass-compensatory (type 3 or 7) approaches. As individualized instruction gains in prominence and popularity, we will see interesting attempts to apply it within the context of traditional objectives: the teaching of a pre-determined package of discrete elements of knowledge tailor made to the individual learner, particularly in the form of programmed instruction (type 6). I suspect that the majority of FL teachers today could see themselves working under such conditions. The mass-compensatory combination is more problematic. It is the typology that some so-called "free schools" follow today: the exposure in school to a set of pre-determined uniform conditions with the expectation of similar minimal attainment and similar sequential cumulative acquisition steps, but not defining these conditions in terms of the usual course content. It retains the age-graded promotion idea while at the same time rejecting textbooks and traditional subject area divisions.

I have now completed my journey through the EBTA cube and I hope it has served a facilitating, rather than a befuddling function, a new way perhaps of discussing the problems and challenges that face FL education today.

Initiating Change: The Ebtamobile Trip

In this final section I would like to make more specific suggestions as to the kind of changes in FL instruction that I think are desirable. The EBTA cube represents a way of talking about the philosophy of teaching that is basic and general. How does movement take place within the EBTA cube, say if we wish to move from the top right hand corner (type 4) to the bottom left hand corner? A method of translocation occurs to me which I shall briefly describe, but given its presently unrefined character, I hope it will be taken not as a method to be applied, but rather a method to be discussed. I shall call this proposed solution to the problem of initiating change in basic approaches to teaching as the Triadic Method of Least Resistance and the ensuing profile of the instructional changes as the Ebtamobile Path.

Step 1. List the instructional areas in which you believe you have some degree of control. I would like to suggest the following seven general headlines:

- A. The shape of the overall curriculum
- B. Course content and materials
- C. Classroom activities and assignments
- D. Type of tests and their timing
- E. Nature of grading system
- F. Distribution of time and work modules
- G. Opportunity for diagnostic and remedial activities

Step 2. Get together with administrators and supervisors and discuss all alternatives that occur to you in these instructional areas in connection with the following four directions of change:

- 1. Ratio of student/nont-student initiated acts
- 2. Specificity of student contract
- 3. Degree of self-pacing
- 4. Nature of student/teacher interaction

Theoretically, you have a 7 x 4 matrix of 28 boxes each of which are independent of one another (see Table 1). For instance, for area A (The shape of the overall curriculum), the ratio of student initiated acts may be quite low, whereas it may be quite high in areas D or F. The degree of self-pacing may be substantial in area F and insignificant in area D. A specific contract may be drawn up between the student and the teacher in area D but imposed by the teacher in area B. By "nature of student/teacher interaction" I have in mind particularly two scales: (i) teacher as authority figure vs. teacher as tutor or facilitator and, (ii) high vs. low empathic understanding between student and teacher (see Barrett-Lennard, 1962).

Step 3. Get together with the students and discuss these alternatives with them, noting whatever additional suggestions they may have.

Step 4. Make a list of possible changes within each of the 28 boxes and arrange them in a rank order of extent of departure from current practices such that the change in rank position 1 would be minimal and that in position 10 (say) would be fundamental, with 5 being "somewhat rocking the boat but not pulling down the roof over your head." You end up with a matrix list of 280 changes (10 changes within each of the 28 boxes). This grid of 280 change items constitutes the possible theoretical path of the ebtabmobile. To determine the actual path that is possible for you, with your particular students and in your particular school at any particular time, figure out the path of least resistance as follows.

Step 5. Draw a line above the first change item in each of the 28 boxes which represents for you the point of psychological stress, that is a change that you cannot live with comfortably if you were to function under those conditions. In some boxes your stress point may be at rank 2, in others you may be courageous enough to go down to rank 6 or 7. You end up with 28 scores for yourself varying between 1 and 10 (if you used a ten-point scale). This is your psychological change profile. Now determine in a similar way the psychological change profile for your supervisor, and also for each of your students if you are committed to an advanced individualized instruction program, or, if you are working in a mass oriented environment, use the average student psychological change profile for the class. Determine the path of least resistance by computing a geometric average for the three psychological change profiles. This will give you the context specific instructional profile that is possible in your school at this time.

Step 6. Implement immediately all the change items in each of the 28 boxes that fall above the line of the path of least resistance.

And Presto! - you are well on your way towards an individualized program. A cautionary note: it should be good practice to recompute the path of least resistance at the beginning of each semester.

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Footnotes

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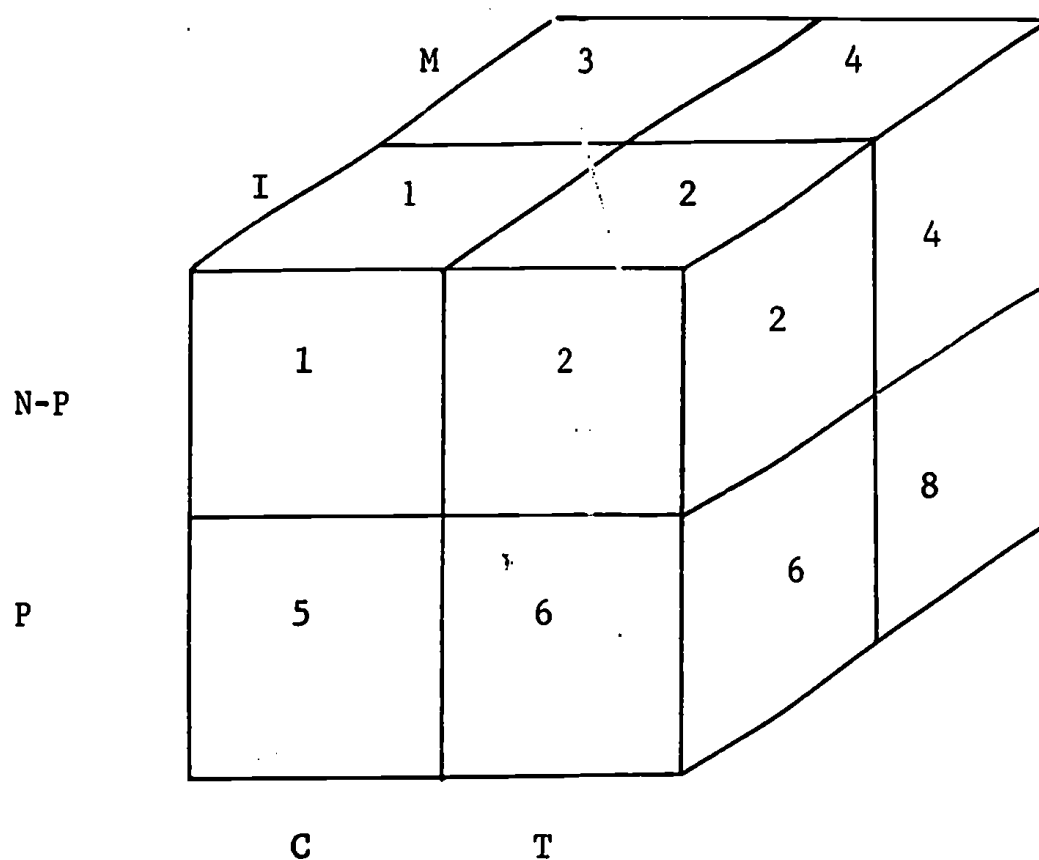


Fig. 1 a

Non-programmed				Programmed			
Individualized		Mass		Individualized		Mass	
Comp.	Trad.	Comp.	Trad.	Comp.	Trad.	Comp.	Trad.
1	2	3	4	5	6	7	8

Fig. 1 b

Eight Basic Approaches to Teaching: The EBTA Cube

TABLE 1

The Triadic Method of Least Resistance

Steps 1-4: The theoretically possible paths: 280 changes

		1	2	3	4
A. The shape of the overall curriculum	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
B. Course content and materials					
C. Classroom activities and assignments					
D. Type of tests and their timing					
E. Nature of grading system					
F. Distribution of time and work modules					
G. Opportunity for diagnostic and remedial activity					

1 = Ratio of student/non-student initiated acts

2 = Specificity of student contract

3 = Degree of self-pacing

4 = Nature of student/teacher interaction (degree of facilitation; empathic understanding)

Steps 5-6: Draw line above geometric average of stress points in each box between teacher/administrator/student, and implement.